



# Briefing for the National Association of Secretaries of State

February 7, 2005

Mark Skall, Chief, Software Testing Division  
National Institute of Standards and Technology



# NIST “Help America Vote Act” Mandates

- Chair Technical Guidelines Development Committee (TGDC)
- Provide technical support to TGDC in the development of voluntary voting system guidelines including:
  - Security
  - Methods to detect and prevent fraud
  - Human factors, including technologies for individuals with disabilities
- Write and submit a human factors report to Congress
- Conduct an evaluation of independent, non-federal testing laboratories:
  - “Submit to the Election Assistance Commission (EAC) a list of those laboratories the Director proposes to be accredited to carry out the testing, certification, decertification, and recertification of voting systems”



## NIST HAVA Milestones

- December 2003: Held 1<sup>st</sup> *Symposium on Increasing Trust and Confidence in Voting Systems* at NIST
- April 2004: Delivered Report to Congress: *Improving the Usability and Accessibility of Voting Systems and Products* in consultation with EAC
- July 2004: Chaired 1<sup>st</sup> plenary session of TGDC - adopted work plan
- August 2004: Hosted Laboratory Accreditation Workshop at NIST
- September 2004: Conducted TGDC public hearings to gather data and information on human factors, privacy, computer security, transparency, core requirements and testing of voting systems
- October 2004: Posted voting software “hashes” for use by state and local election officials at National Software Reference Library Web Site:  
<http://www.nsrl.nist.gov/votedata.html>
- October-December 2004: Conducted 17 TGDC Subcommittee teleconferences



# NIST HAVA 2005 Milestones and Goals

- January 2005: Held second plenary session of TGDC, adopted 31 resolutions defining NIST technical guidance tasks
- January 2005: Entered into formal MOU with EAC
- February-March 2005: Complete technical guidance for most critical tasks in TGDC resolutions to affect voluntary voting system standards for the 2006 Election Cycle
- April 2005: Initial TGDC recommendations for voting system standards forwarded to EAC
- April 2005: Begin accepting applications for National Voluntary Laboratory Accreditation Program (NVLAP)
- August 2005: Complete second round of technical guidance tasks in TGDC resolutions
- November 2005: Complete third round of technical guidance tasks in TGDC resolutions



# NIST/TGDC Committee Structure & Coordination

- TGDC resolution (*July '04*) established 3 subcommittees to gather and analyze information:
  - Security and Transparency
  - Human Factors and Privacy
  - Core Requirements and Testing
- Subcommittees don't vote or seek consensus
- Subcommittees are interdisciplinary and coordination is essential
- Subcommittees adhere to common organizational framework for standards development
- Subcommittees meet at least every two weeks via teleconference
  - NIST voting team staff participates in teleconferences
  - Public provided access to teleconferences via the Internet
- NIST and subcommittee members conduct occasional face to face meetings
- Research and coordination done in-between subcommittee meetings



## TGDC Committee Structure & Coordination

- Resolutions adopted at TGDC Plenary Sessions by consensus
- Future plenary TGDC sessions planned for March 2005 and April 2005
- Initial recommendations for voluntary voting system guidelines will be delivered to the Election Assistance Commission after the April 2005 TGDC meeting.



## Strategy for Prioritizing Resolutions

- Highest priority is to provide guidance to states in time for the 2006 election cycle
- Focus is on:
  - Improving the voting system standards (e.g., filling in the gaps) to address security, human factors and other immediate needs (i.e., VVPAT)
  - Correcting errors in the voting system standards
  - Ensuring that the installed software is the same as the tested software





## Strategy for Publication

- To affect 2006 election cycle, guidance needs to be available in April
- Focus in April deliverable will be an addendum that augments and corrects the current VSS
- Draft for a new voting standard, that builds upon the 2002 VSS, will be developed in parallel





## Priority of Resolutions- Group 1

- Highest priority will be assigned to April addendum. It will include:
  - VVPAT including requirements for attaching printers
  - Use of wireless technology
  - Software distribution, setup, and documentation, including the use of the NSRL
  - Accessibility and usability, based on HAVA Section 301
  - Interim conformance clause
  - Glossary



## Priority of Resolutions – Group 2

- Recommendations for the next edition of the VSS
- Incorporates and enhances material developed in the addendum to the 2002 VSS and work on reorganizing and re-writing requirements to make them more precise and testable
- Areas include:
  - COTS approach
  - Analysis of software coding standards
  - Applicability of computer security FIPS to voting
  - Computer security
  - Improved human factors and accessibility
  - Strategy for addressing multiple representation of ballots
  - Testing methodology



## Priority of Resolutions – Group 3

- These include all resolutions passed by the TGDC that are not included in Groups 1 and 2
- They will be addressed after April and include:
  - Usability of the standards
  - Common ballot format specifications
  - Quality management standards
  - Maintenance of the VSS
  - Sharing information and de-qualification of voting systems
  - Assessment papers on recommendation for future work



# NIST /TGDC Information Resources

- Public web page at: [vote.nist.gov](http://vote.nist.gov)
- Public comment on TGDC process accepted at: [voting@nist.gov](mailto:voting@nist.gov)
- Public Comment Posted at: <http://vote.nist.gov/ECPosStat.htm>
- TGDC plenary session webcasts: <http://www.eastbaymedia.com/tgdc-webcast/>
- TGDC Subcommittee Meeting Teleconferences:  
<http://vote.nist.gov/HearingsandTranscripts.htm>
- National Voluntary Laboratory Accreditation Program:  
<http://ts.nist.gov/ts/htdocs/210/214/whatsnew.htm>
- National Software Reference Library:  
<http://www.nsrl.nist.gov/vote.html>
- TGDC Adopted Resolutions:  
<http://vote.nist.gov/TGDCresolutions0118unt.pdf>



# NIST Contacts

Mark Skall

[mark.skall@nist.gov](mailto:mark.skall@nist.gov)

(301) 975-3262

Barbara Guttman

[Barbara.guttman@nist.gov](mailto:Barbara.guttman@nist.gov)

(301) 975-4207

Lynne Rosenthal

[lsr@nist.gov](mailto:lsr@nist.gov)

(301) 975-3353